

57098



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

CENTRAL REGIONAL LABORATORY
839 BESTGATE ROAD
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DATE : April 4, 1989

SUBJECT: Organic Data Validation for the Cryochem NPL Site
(PRP Data)

FROM : Theresa A. Simpson
Region III Acting ESAT DPO (3ES23)

TO : Chris Pilla
Regional Project Manager (3HW12)

THRU : Patricia J. Krantz
Chief, QA Section (3ES23)

Attached is the organic data review for the Cryochem NPL Site (PRP Data) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III ESD.

If you have any questions regarding this review, please call me.

Attachment

TID File: 03890213 Task 1486

AR300832



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MANAGERS DESIGNERS CONSULTANTS
DATE: March 30, 1989

SUBJECT: Organic Data Validation for Case 10636
Site: Cryochem NPL

FROM: Sudabeh Rowshan-Kolar
Organic Data Reviewer

SPY
Albert T. Ellis
Senior Organic Data Reviewer

TO: Terry Simpson
Acting ESAT Deputy Project Officer

THROUGH: Charles E. Matkovich
ESAT Team Manager

Overview

Case 10636 consisted of a total of twenty-six (26) water samples. All twenty-six (26) samples were analyzed for pesticide/PCBs, only twenty-five (25) of those were analyzed for volatiles, and seven (7) of those were analyzed for semi-volatiles. All samples were analyzed following Contract Laboratory Program (CLP) protocol.

Summary

All samples were successfully analyzed for all target compounds with the exception of 2-butanone. All instrument and method sensitivities were according to Contract Laboratory Program protocol.

Minor Problems

- o The response factors (RF) for 2-butanone were less than 0.05 in the initial and/or continuing calibrations. The positive results were qualified "B", due to the presence of this compound in the blank. (See Forms VI, VII and Table I in Appendix E).
- o Several compounds failed precision criteria for the initial and continuing calibrations. Positive results are qualified "J" and detection limits are qualified "UJ" for the affected samples. (See Table I of Appendix E).
- o Since the sampling date was not provided, the receiving date was used for the technical holding time. The analyses of aromatic volatile compounds in several samples exceeded the technical holding time by one (1) to three (3) days. Positive results are qualified "L" and quantitative limits are qualified "UL" for these compounds in the affected samples.

AR300833

Notes:

- The maximum concentrations of compounds found in the field, trip or method blanks are listed below. All samples with concentrations of common laboratory contaminants less than ten times (<10x) the blank level and uncommon laboratory contaminants less than five times (<5x) the blank level have been qualified "B" on the data summary forms. (See also Appendix F).

<u>Compound</u>	<u>Concentration (ug/L)</u>
acetone*	16
2-butanone*	15
4-methyl-2-pentanone	3 J
chloroform*	3 J
styrene	1 J
total xylenes	1 J
bis(2-ethylhexyl)phthalate*	3 J

* = Common Laboratory Contaminants

- The laboratory did not submit any tentatively identified compounds (TICs) forms for the volatile and semi-volatile fractions.

All data for Case 10636 were reviewed in accordance with the Functional Guidelines for Evaluating Organic Analyses with Modifications for Use Within Region III. The text of this report addresses only those problems affecting usability.

Attachments

- 1) Appendix A - Glossary of Data Qualifiers
- 2) Appendix B - Data Summary. These include:
 - (a) All positive results for target compounds with qualifier codes where applicable.
 - (b) All unusable detection limits (qualified "R").
- 3) Appendix C - Results as Reported by the Laboratory for All Target Compounds
- 4) Appendix D - Report of Contractual Compliance
- 5) Appendix E - Support Documentation

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Appendix A
Glossary of Data Qualifiers

AR300835

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GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unreliable result. Compound may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

S = Compound present. Reported value may not be accurate or precise.

K = Compound present. Reported value may be biased high. Actual value is expected to be lower.

L = Compound present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

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Appendix B
Data Summary Forms

AR300837

DATA SUMMARY FORM: VOLATILES 1

Site Name: Churchman NPL
Case #: 10636 Sampling Date: WATER SAMPLES
($\mu\text{g/l}$)To calculate sample quantitation limit:
(CQL * Dilution Factor)

CQL	COMPOUND	Sample No.	Dilution Factor							Location
			10	20	28	35	37	47	50	
10	Chloroethane									
10	Dimethylamine									
10	*Vinyl Chloride									
10	Chloroethene									
5	*Methylene Chloride									
10	Acetone	15	B	20	B	13	B	15	B	
5	Carbon Disulfide									
5	*1,1-Dichloroethene									
5	1,1-Dichloroethane									
5	*Total-1,2-Dichloroethene									
5	Chloroform									
5	*1,2-Dichloroethane									
10	*2-Butanone	15	B	12	B	11	B	11	B	
5	*1,1,1-Trifluoroethane									
5	*Carbon Tetrachloride									
10	Vinyl Acetate									
5	Dimethylchloroethane									

CQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

300838

Site Name: Crytchem MPL

Case #: 10636 Sampling Date: _____

DATA SUMMARY FORM: VOLATILES 2

WATER SAMPLES
($\mu\text{g/L}$)

To calculate sample quantitation levels
(CQL * Dilution Factor)

CQL	COMPOUND	Sample No.	10	20	28	35	37	47	50	52	54
			Dilution Factor	1	1	1	1	1	1	1	1
5	*1,2-Dichloropropane										
5	1,2-Dichloropropene										
5	1,1-Dichloroethane										
5	1,1,2-Trichloroethane										
5	Benzene		UL	UL	UL	UL	UL	UL	UL	UL	UL
5	Trans-1,3-Dichloropropene										
5	Dimethyl		UL	UL	UL	UL	UL	UL	UL	UL	UL
10	4-Methyl-2-pentanone										
10	2-Hexanone										
5	Tetrachloroethene										
5	1,1,2,2-Tetrachloroethane										
5	Toluene		UL	UL	UL	UL	UL	UL	UL	UL	UL
5	Chlorobenzene										
5	Ellipticlanzene										
5	Sterane										
5	Total Xylenes		✓	✓	✓	✓	✓	✓	✓	✓	✓

CQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

300839

DATA SUMMARY FORM: PESTICIDES AND PCB'S

Site Name: Crychem NPLCase #: 10636 Sampling Date: WATER SAMPLES
(ug/L)To calculate sample quantitation limits
(CRRL * Dilution Factor)

CRRL	COMPOUND	Sample No.							To calculate sample quantitation limits (CRRL * Dilution Factor) <u> </u>
		10	20	28	35	37	47	50	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Location									
0.05	alpha-BHC								
0.05	Beta-BHC								
0.05	Delta-BHC								
0.05	*Gamma-BHC (Lindane)								
0.05	Heptachlor								
0.05	Aldrin								
0.05	Heptachlor Epoxide								
0.05	Endosulfan I								
0.10	Dieldrin								
0.10	4,4'-DDT								
0.10	*Endrin								
0.10	Endosulfan II								
0.10	4,4'-DDD								
0.10	Endosulfan Sulfate								
0.10	4,4'-DDF								
0.5	*Methoxychlor								
0.10	Endrin Ketone								
0.5	*Alpha-Chlordane								
0.5	*Gamma-Chlordane								
1.0	Toxaphene								
0.5	*Aroclor-1016								
0.5	*Aroclor-1221								
0.5	*Aroclor-1232								
0.5	*Aroclor-1242								
0.5	*Aroclor-1248								
1.0	*Aroclor-1254								
1.0	*Aroclor-1260								

CRRL = Contract Required Quantitation Limit

Con Level Exists

SEE NARRATIVE FOR DEFINITIONS

DATA SUMMARY FORM: VOLATILES

1

Site Name: Superfund NPL
Case #: 10636 Sampling Date:WATER SAMPLES
(ug/L)✓
Sample No. 56 65 78 79-1 80 88 89 103 112
Dilution Factor 1 1 1 1 1 1 1 1 1
Location ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓To calculate sample quantitation limit:
(CQL * Dilution Factor)

CHOL	COMPOUND								
10	Chloroanisole		UCL						
10	Benzene								
10	*Vinyl Chloride								
10	Chloroethylene								
5	Methylchloro Ethane								
10	Acetone	11	B	14	B	16	B	21	B
5	Carbon Disulfide								
5	1,1-Dichloroethene								
5	1,1-Dichloroethane								
5	1,1,2-Trichloroethane								
5	Chloroform								
5	1,2-Dichloroethane								
10	2-Butanone	14	B	14	B	13	C	17	C
5	1,1,1-Trichloroethane								
5	*Cathartellene								
10	Vinyl Acetate								
5	Dimethylchloroethylene								

CQL = Contract Noquid Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

R300842

DATA SUMMARY FORM: VOLATILES 2

WATER SAMPLES
(ug/L)To calculate sample quantitation limits
(CRQL * Dilution Factor)Site Name: Cayucos NPL
Case #: 10636 Sampling Date:

CRQL	COMPOUND	Sample No.	56	65	78	79-1	80	88	89	103	112
		Dilution Factor	1	1	1	1	1	1	1	1	1
		Location									
5	*1,2-Dichloropropane										
5	Cl ₃ -1,3-Dichloropropene										
5	1,1-Dichloroethylene										
5	1,1,2-Trichloroethane										
5	Benzene										
5	trans-1,3-Dichloropropene										
5	Drometrizole										
10	4-Methyl-2-pentanone										
10	2-Hexanone										
5	Tetrachloroethene										
5	1,1,2,2-Tetrachloroethene										
5	Toluene										
5	Chlorobenzene										
5	Ethylbenzene										
5	Syrene										
5	Total Xylenes										

CRQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

DATA SUMMARY FORM: VOLATILES

Site Name: Camptchen NPL
Case #: 10636 Sampling Date: _____WATER SAMPLES
(ug/L)To calculate sample quantitation limit:
(CQL * Dilution Factor) R

CQL	COMPOUND	Sample No.	Tap Blank Concentration (ug/L)					
			120	123	124	126	128	133
10	Chloroethylene			VL				VL
10	Monochloroethane							
10	*VinyL Chloride							
10	Chloroacetone							
5	Methylchloro Chloride							
10	Acetone	28	B	11	B	6.5	VL	25
5	Carbon Disulfide							
5	1,1-Dichloroethane							
5	1,1,1-Trichloroethane							
5	Total 1,2-Dichloroethane							
5	Chloroform							
5	1,2-Dichloroethane							
10	*2-Chloropropane							
5	1,1,1-Trichloroethane							
5	*Carbon Tetrachloride							
10	Vinyl Acetate							
5	Styrene/Chloroethylene							

CQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

DATA SUMMARY FORM: VOLATILES 2

4

Site Name: Captachem NPLCase #: 10636 Sampling Date: WATER SAMPLES
(ug/L)To calculate sample quantitation limit:
(CQL * Dilution Factor)

CQL	COMPOUND	WATER SAMPLES (ug/L)							
		Sample No.	Dilution Factor	Location	120	123	124	126	128
5	*1,2-Dichloropropane								
5	1,3-Dichloropropene								
5	1,1-Dichloroethene								
5	1,1,2-Trichloroethane								
5	1-Benzene	UL							
5	1,3-Dichloroprene	UL							
5	1,4-Dioxane	UL							
10	1,4-Methyl-2-pentanone	UL							
10	2-Hexanone	UL							
5	Tetrachloroethene	UL							
5	1,1,2,2-Tetrachloroethane	UL							
5	Toluene	UL							
5	Chlorobenzene	UL							
5	Ethylbenzene	UL							
5	Styrene	UL							
5	Total Xylenes	UL							

CQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

AR30.0845

DATA SUMMARY FORM: B N A S 1

WATER SAMPLES
(ug/L)Site Name: Caysochem API
Case #: 10636 Sampling Date: _____To calculate sample quantitation limit:
(CQOL * Dilution Factor)

CQOL	COMPOUND	Sample No.					Trip-Blank	Blank
		56	79-1	112	123	133		
	Dilution Factor	Location						
10	Phenol							
10	bis(2-Chloroethyl)ether							
10	2-Chlorophenol							
10	*1,3-Dichlorobenzene							
10	*1,4-Dichlorobenzene							
10	Benzyl Alcohol							
10	1,2-Dichlorobenzene							
10	2-Methylphenol							
10	bis(2-Chloroisopropyl)ether	DL						
10	4-Methylphenol	DL						
10	N,Nitroso-dn propylamine	DL						
10	Hexachloroethane	DL						
10	Nitrobenzene	DL						
10	Isophorone	DL						
10	2-Nitrophenol	DL						
10	2,4-Dimethylphenol	DL						
50	Benzole Acid	DL						
10	bis(2-Chloroethyl)benzene	DL						
10	2,4-Dimethoxyphenol	DL						
10	1,2,4-Trichlorobenzene	DL						
10	Naphthalene	DL						
10	4-Chloronitrite	DL						

CQOL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

DATA SUMMARY FORM: B N A S 2

463008

WATER SAMPLES
(ug/L)To calculate sample quantitation
(CTRL * Dilution Factor)
Dilution Factor:Site Name: Cyrtexco NPL
Case #: 10636 Sampling Date:

CHOL	COMPOUND	Sample No. 1	91-1	112	123	133	Trip blank	Sample #6
10	Hexachlorobutadiene							
10	4-Chloro-3-methylphenol							
10	2-Methylheptaphthalene							
10	Hexachlorocyclohexadiene							
10	2,4,6-Trichlorophenol							
50	2,4,5-Trichlorophenol							
10	2-Chloronaphthalene							
50	2-Nitroaniline							
10	Dimethyl phthalate							
10	Acenaphthylene							
10	2,6-Dimethoxyne							
50	3-Nitroaniline							
10	Acenaphthene							
50	2,4-Dinitrophenol							
50	4-Nitrophenol	DL		UJ	UJ	UJ	UJ	UJ
10	Obenzofuran							
10	2,4-Dinitrotoluene							
10	Diethylphthalate							
10	4-Chlorophenyl phenyl ether							
10	Fluorene							
50	4-Nitroaniline							
50	4,6-Dinitro-2-methylphenol							

CQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITION

DATA SUMMARY FORM: BNASS 3

Site Name: Cayuga Creek
Case #: 10636 Sampling Date: WATER SAMPLES
($\mu\text{g/L}$)To calculate sample quantitation limit
(CQL • Dilution Factor) 3

CTRL	COMPOUND	Sample No.	Dilution Factor	Location	Triple Blank	3.01.0.L.	AP
10	N-Nitrosodiphenylamine	56	79-1	112	123	133	
10	4-Bromophenylphenylether					1	
10	4-Hexachlorobenzene						
50	Pentachlorophenol						
10	Phenanthrene						
10	Anthracene						
10	Dibutylphthalate						
10	1-Moranilene						
10	Pyrene		UV				
10	Butylbenzylphthalate		UV		UV	UV	
20	3,3-Dichlorobenzidine		UV		UV	UV	
10	Benzofluorilacene		UV		UV	UV	
10	Chrysene		UV		UV	UV	
10	Bis(2-Ethylhexyl)phthalate		3	B			
10	Dimethyl phthalate					3	
10	Benzophenone		UV		UV	UV	
10	Uenzokl Moranilene		UV		UV	UV	
10	Benzoglycene		UV		UV	UV	
10	Methoxy(1,2-cyclopropane		UV		UV	UV	
10	Dibenzofluorilacene		UV		UV	UV	
10	Dibenzofluorilacene		UV		UV	UV	

CQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE DEFINITION

DATA SUMMARY FORM: PESTICIDES AND PCB'S

Site Name: Cryscene NPLCase #: 10636 Sampling Date: WATER SAMPLES
(ug/L)To calculate sample quantitation limit:
(ctrl. + Dilution Factor) 0.04

CTRL.	COMPOUND	Sample No.	56	65	78	79-1	80	82	84	103	1123
			Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
0.05	*Alpha-WIC										
0.05	Beta-WIC										
0.05	Delta-DIC										
0.05	*Gamma-DIC (Mildane)										
0.05	*Heptachlor										
0.05	Alpham										
0.05	Heptachlor Epoxide										
0.05	Endosulfan I										
0.10	Dieldrin										
0.10	4,4'-DDT										
0.10	*Endrin										
0.10	Endosulfan II										
0.10	4,4'-DDD										
0.10	Endosulfan Sulfate										
0.10	4,4'-DDE										
0.5	*Methoxychlor										
0.10	Ethox ketone										
0.5	*Alpha-Chlordane										
0.5	*Gamma-Chlordane										
1.0	*Toxaphene										
0.5	*Aroclor-1016										
0.5	*Aroclor-1221										
0.5	*Aroclor-1232										
0.5	*Aroclor-1242										
0.5	*Aroclor-1240										
1.0	*Aroclor-1254										
1.0	*Aroclor-1260										

CTRL = Control Required Quantitation Limit

• Not Level Exists

SEE NARRATIVE FOR DEFINITIONS

DATA SUMMARY FORM: PESTICIDES AND PCB'S

Site Name: Cryschem NPLCase #: 10636 Sampling Date: _____WATER SAMPLES
($\mu\text{g/L}$)To calculate sample quantitation limit
(CQL * Dilution Factor)

CQL	COMPOUND	Sample No.						Trip Mean	Crack blank	QL
		120	123	124	126	128	133			
		Dilution Factor	Location							
0.05	*alpha-HIC	1.0								
0.05	beta-HIC	1.0								
0.05	delta-HIC	1.0								
0.05	*Gamma-HIC (Indane)	1.0								
0.05	*Heptachlor	1.0								
0.05	Alph	1.0								
0.05	Iperaclor, Epoxide	1.0								
0.05	Eudistol I	1.0								
0.10	Udeolin	1.0								
0.10	4,4'-DDE	1.0								
0.10	*Endoth	1.0								
0.10	Endosulfan II	1.0								
0.10	4,4'-DDD	1.0								
0.10	Endosulfan Sulfate	1.0								
0.10	4,4'-DDT	1.0								
0.5	*Methoxychlor	1.0								
0.10	Endoth Ketone	1.0								
0.5	*Alpha-Chlordane	1.0								
0.5	*Gamma-Chlordane	1.0								
0.5	Toxaphene	1.0								
0.5	*Aroclor-1016	1.0								
0.5	*Aroclor-1221	1.0								
0.5	*Aroclor-1232	1.0								
0.5	*Aroclor-1242	1.0								
0.5	*Aroclor-1240	1.0								
1.0	*Aroclor-1254	1.0								
1.0	*Aroclor-1260	1.0								

CQL = Contract Required Quantitation Limit

* Action Level Exists

SEE NARRATIVE FOR CODE, DEFINITIONS

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Appendix C

**Results as Reported by the Laboratory
for All Target Compounds**

AR300850

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10 LIQUID

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719745V

Sample wt/vol: (g/mL) ML Lab File ID: 719745V

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/22/88

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	15	B
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	15	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300851

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

10

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719745

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-86

% Moisture: Date Extracted: 10-20-86

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-09-86

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND		
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N^O

20

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719748

Sample wt/vol: _____ (g/mL) ML Lab File ID: 719748VR

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/21/88

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND		
74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	20	
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	2	J✓
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	12	B✓
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

ID
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

20

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719748

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-88

% Moisture:

Date Extracted: 10-21-88 RRM

Extraction: (SepF/Cont/Sonc) SEP F

Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N

pH: 6.5

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

28

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719754

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 719754VR

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/21/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	B
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

AR300855

000058

SAMPLE NO.

ID

PESTICIDE ORGANICS ANALYSIS DATA SHEET

28

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719754

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: 10-20-88 RRT

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-10-88

GPC Cleanup: (Y/N) N pH: 5.5 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000186

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

35

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719752

Sample wt/vol: (g/mL) ML

Lab File ID: 719752VR2

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/21/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	15	
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	11	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

AR300357

000054

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

35

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719752

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-88

% Moisture:

Date Extracted: 10-20-88 RRF

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11-10-88

GPC Cleanup: (Y/N) N

pH: 7.8

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO _____

37

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719746

Sample wt/vol: (g/mL) ML Lab File ID: 719746VR

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/21/88

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
---------	----------	---	------	---

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	22	
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	11	R
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300859

000042

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

37

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719746

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-21-88 #123151

Extraction: (SepF/Cont/Sonc) SEPFI Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO _____

47

Lab Name: Q C INC Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719751VR

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 719751VR

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/23/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	15	
67-64-1-----	Acetone	7	BJ
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	11	BJ
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300861

000052

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

47

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719751

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-86

% Moisture:

Date Extracted: 10-21-86 11-23-86 RRH

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11-10-86

GPC Cleanup: (Y/N) N

pH: 6.9

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000139

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

50

Lab Name: Q C INC Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719749

Sample wt/vol: (g/mL) ML Lab File ID: 719749VR

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not.dec. Date Analyzed: 10/21/88

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Q

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	12	B
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

AR300863

000048

ID
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

50

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719749

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-88

% Moisture:

10-20-88 RPT

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 10-21-88 11/23/88

GPC Cleanup: (Y/N) N

pH: 6.9

Date Analyzed: 11-10-88

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Die�drin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000093

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

52

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719747

Sample wt/vol: (g/mL) ML

Lab File ID: 719747VR

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/21/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L

Q

CAS NO.	COMPOUND			
74-87-3	Chloromethane	10	U	
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	U	
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	5	U	
67-64-1	Acetone	70	U	
75-15-0	Carbon Disulfide	5	U	
75-35-4	1,1-Dichloroethene	5	U	
75-35-3	1,1-Dichloroethane	5	U	
540-59-0	1,2-Dichloroethene (total)	5	U	
67-66-3	Chloroform	1	J	
107-06-2	1,2-Dichloroethane	5	U	
78-93-3	2-Butanone	39	B	
71-55-6	1,1,1-Trichloroethane	40	U	
56-23-5	Carbon Tetrachloride	5	U	
108-05-4	Vinyl Acetate	10	U	
75-27-4	Bromodichloromethane	5	U	
78-87-5	1,2-Dichloropropane	5	U	
10061-01-5	cis-1,3-Dichloropropene	5	U	
79-01-6	Trichloroethene	18	U	
124-48-1	Dibromochloromethane	5	U	
79-00-5	1,1,2-Trichloroethane	5	U	
71-43-2	Benzene	2	J	
10061-02-6	Trans-1,3-Dichloropropene	5	U	
75-25-2	Bromoform	5	U	
108-10-1	4-Methyl-2-Pentanone	10	U	
591-78-6	2-Hexanone	10	U	
127-18-4	Tetrachloroethene	5	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	5	U	
108-90-7	Chlorobenzene	5	U	
100-41-4	Ethylbenzene	5	U	
100-42-5	Styrene	5	U	
	Total Xylenes	5	U	

AR300865

000044

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

52

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719747

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88 RPT

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N pH: 5.3 Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000050

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NC

54

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131

Case No.: JACAVQ

SAS No.:

SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719743

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 719743VR

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. _____

Date Analyzed: 10/22/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	2	BJ
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	13	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloroproppane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	77	
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

AR300867

000038

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

54

Lab Name: _QC Inc._

Contract: __JACA__

Lab Code: 77166/77648 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) _WATER__

Lab Sample: __719743__

Sample wt/vol: __1000__ (ml/ml) __10__ Lab File ID: _____

Level: (low/med) _____

Date Received: __10-13-86__

% Moisture: _____

Date Extracted: __10-20-86__

Extraction: (SepF/Cont/Sonc) _SEPF____

Date Analyzed: __11-09-86__

GPC Cleanup: (Y/N) _N__

pH: __7.6__

Dilution Factor: __1.0__

CONCENTRATION UNITS:

(ug/L or ug/Kg) _UG/L__

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _UG/L__	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000407

EPA SAMPLE NO

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

56

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719774

Sample wt/vol: (g/mL) ML Lab File ID: 715774V

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/20/88

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	11	B
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	14	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	28	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET00009
EPA SAMPLE NO.

Lab Name: Q C INC.

Contract: _____

56 LIQUID

Lab Code: _____ Case No.: JACA2

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719774

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719774AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

dec. Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc)

SEPF

Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N

pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl)Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	i,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
100-51-6-----	Benzyl Alcohol	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
65-85-0-----	Benzoic Acid	50	U
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Choronaphthalene	10	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethyl Phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U

1C
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET000094
EPA SAMPLE NO.

56 LIQUID

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACA2

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719774

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719774AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. dec. _____

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

000080

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

56

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719774

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88 RRA

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-10-88

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000229

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

65 LIQUI

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719755V

Sample wt/vol: (g/mL) ML Lab File ID: 719755V

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/22/88

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	14	B
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

000060

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

65

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719755

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88 RPH

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-10-88

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

78

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: _____ SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719753

Sample wt/vol: _____ (g/mL) ML Lab File ID: 719753VR

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. _____ Date Analyzed: 10/21/88

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
74-87-3-----	Chloromethane	10	U	
74-83-9-----	Bromomethane	10	U	
75-01-4-----	Vinyl Chloride	10	U	
75-00-3-----	Chloroethane	10	U	
75-09-2-----	Methylene Chloride	5	U	
67-64-1-----	Acetone	16	U	
75-15-0-----	Carbon Disulfide	5	U	
75-35-4-----	1,1-Dichloroethene	5	U	
75-35-3-----	1,1-Dichloroethane	5	U	
540-59-0-----	1,2-Dichloroethene (total)	5	U	
67-66-3-----	Chloroform	5	U	
107-06-2-----	1,2-Dichloroethane	5	U	
78-93-3-----	2-Butanone	13	B	
71-55-6-----	1,1,1-Trichloroethane	5	U	
56-23-5-----	Carbon Tetrachloride	5	U	
108-05-4-----	Vinyl Acetate	10	U	
75-27-4-----	Bromodichloromethane	5	U	
78-87-5-----	1,2-Dichloropropane	5	U	
10061-01-5-----	cis-1,3-Dichloropropene	5	U	
79-01-6-----	Trichloroethene	5	U	
124-48-1-----	Dibromochloromethane	5	U	
79-00-5-----	1,1,2-Trichloroethane	5	U	
71-43-2-----	Benzene	2	J	
10061-02-6-----	Trans-1,3-Dichloropropene	5	U	
75-25-2-----	Bromoform	5	U	
108-10-1-----	4-Methyl-2-Pentanone	10	U	
591-78-6-----	2-Hexanone	10	U	
127-18-4-----	Tetrachloroethene	5	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U	
108-88-3-----	Toluene	5	U	
108-90-7-----	Chlorobenzene	5	U	
100-41-4-----	Ethylbenzene	5	U	
100-42-5-----	Styrene	5	U	
	Total Xylenes	5	U	

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FORM I VOA

1/87

000056

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

78

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719753

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88 RCH

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-10-88

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000307

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

Lab Name: Q C INC.	Contract: JACA	79-1
Lab Code: 09-131	Case No.: JACAVO	SAS No.: SDG No.: 0
Matrix: (soil/water) WATER	Lab Sample ID: 719770	
Sample wt/vol: _____ (g/mL) ML	Lab File ID: 715770V	
Level: (low/med) LOW	Date Received: 10/13/88	
% Moisture: not dec.	Date Analyzed: 10/20/88	
Column: (pack/cap) PACK	Dilution Factor: 1	

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	11	B
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	8	
75-35-3-----	1,1-Dichloroethane	12	
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	17	B
71-55-6-----	1,1,1-Trichloroethane	140	U
56-23-5-----	Carbon Tetrachloride	5	
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	2	J
124-48-1-----	Dibromochloromethane	5	J
79-00-5-----	1,1,2-Trichloroethane	1	J
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	4	BJ
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	J
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	2	J
100-41-4-----	Ethylbenzene	1	J
100-42-5-----	Styrene	1	J
----- Total Xylenes		7	J

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1B
SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET000017
EPA SAMPLE NO.

79-1 LIQUID

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACA2

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719770

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719770AB

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. dec. Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl)Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
100-51-6-----	Benzyl Alcohol	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
65-85-0-----	Benzoic Acid	50	U
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethyl Phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U

00001S

EPA SAMPLE NO.

1C

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

79-1 LIQUID

Lab Name: Q C INC.

Contract:

Lab Code: JACA2 SAS No.: SDG No.: Case No.: JACA2

Matrix: (soil/water) WATER Lab Sample ID: 719770

Sample wt/vol: 1000. (g/mL) ML Lab File ID: 719770AB

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. dec. Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	1,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	3	BJ
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300879

000072

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

79-1

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719770

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-88

% Moisture:

Date Extracted: 10-20-88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N

pH: 7.8

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-2	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000454

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

80

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 722458

Sample wt/vol: (g/mL) ML Lab File ID: 722458V

Level: (low/med) LOW Date Received: 10/13/88

Moisture: not dec. Date Analyzed: 10/21/88

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	21	B
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	16	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	3	BJ
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

AR30088

AR300882

AR300883

000086

ID
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

80

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 722458

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-86

% Moisture: Date Extracted: 10-20-86

Extraction: (SepF/Cont/Sonic) SEPF Date Analyzed: 11-09-86

GPC Cleanup: (Y/N) N pH: 7.9 Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
B001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000294

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88 LIQUID

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719760V

Sample wt/vol: (g/mL) ML

Lab File ID: 719760V

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/22/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

GAS NO.	COMPOUND			
74-87-3-----	Chloromethane	10	U	
74-83-9-----	Bromomethane	10	U	
75-01-4-----	Vinyl Chloride	10	U	
75-00-3-----	Chloroethane	10	U	
75-09-2-----	Methylene Chloride	5	U	
67-64-1-----	Acetone	11	B	
75-15-0-----	Carbon Disulfide	5	U	
75-35-4-----	1,1-Dichloroethene	5	U	
75-35-3-----	1,1-Dichloroethane	5	U	
540-59-0-----	1,2-Dichloroethene (total)	5	U	
67-66-3-----	Chloroform	5	U	
107-06-2-----	1,2-Dichloroethane	5	U	
78-93-3-----	2-Butanone	13	B	
71-55-6-----	1,1,1-Trichloroethane	5	U	
56-23-5-----	Carbon Tetrachloride	5	U	
108-05-4-----	Vinyl Acetate	10	U	
75-27-4-----	Bromodichloromethane	5	U	
78-87-5-----	1,2-Dichloropropane	5	U	
10061-01-5-----	cis-1,3-Dichloropropene	5	U	
79-01-6-----	Trichloroethene	5	U	
124-48-1-----	Dibromochloromethane	5	U	
79-00-5-----	1,1,2-Trichloroethane	5	U	
71-43-2-----	Benzene	5	U	
10061-02-6-----	Trans-1,3-Dichloropropene	5	U	
75-25-2-----	Bromoform	5	U	
108-10-1-----	4-Methyl-2-Pentanone	10	U	
591-78-6-----	2-Hexanone	10	U	
127-18-4-----	Tetrachloroethene	5	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U	
108-88-3-----	Toluene	5	U	
108-90-7-----	Chlorobenzene	5	U	
100-41-4-----	Ethylbenzene	5	U	
100-42-5-----	Styrene	5	U	
-----	Total Xylenes	5	U	

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000070

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

88

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719760

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719742

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 715775V

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/20/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	13	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	D
78-87-5-----	1,2-Dichloropropane	5	D
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	D
75-25-2-----	Bromoform	5	D
108-10-1-----	4-Methyl-2-Pentanone	10	D
591-78-6-----	2-Hexanone	10	D
127-18-4-----	Tetrachloroethene	5	D
79-34-5-----	1,1,2,2-Tetrachloroethane	10	D
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

000036

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

89

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719742

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan-sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

103

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719750

Sample wt/vol: (g/mL) ML

Lab File ID: 719750VR

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/21/88

Column: (pack/cap) PACK

Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
---------	----------	---	------	---

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	3	J
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	13	B
71-55-6-----	1,1,1-Trichloroethane	15	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

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000050

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

103

Lab Name: _QC Inc._ Contract: _JACA_

Lab Code: 77166/77648 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) _WATER_

Lab Sample: _____ 719750 _____

Sample wt/vol: _1000_ (ml/ml) _10_ Lab File ID: _____

Level: (low/med) _____ Date Received: _10-13-88_

% Moisture: _____ ID-20-85 RRH

Date Extracted: _10-21-88_ 11/23/88

Extraction: (SepF/Cont/Sonc) _SEPF_ Date Analyzed: _11-10-88_

GPC Cleanup: (Y/N) _N_ pH: _7.4_ Dilution Factor: _1.0_

CONCENTRATION UNITS:
(ug/L or ug/Kg) _UG/L_

CAS NO.	COMPOUND	Q
319-84-6	alpha-BHC	0.05
319-85-7	beta-BHC	0.05
319-86-8	delta-BHC	0.05
58-89-9	gamma-BHC (Lindane)	0.05
76-44-8	Heptachlor	0.05
309-00-2	Aldrin	0.05
1024-57-3	Heptachlor epoxide	0.05
959-98-8	Endosulfan I	0.05
60-57-1	Dieldrin	0.1
72-55-9	4,4' -DDE	0.1
72-20-8	Endrin	0.05
33213-65-9	Endosulfan II	0.1
72-54-8	4,4' -DDD	0.1
1031-07-8	Endosulfan sulfate	0.1
50-29-3	4,4' -DDT	0.1
72-43-5	Methoxychlor	0.1
53494-70-5	Endrin ketone	
5103-71-9	alpha-Chlordane	0.5
5103-74-2	gamma-Chlordane	0.5
8001-35-2	Toxaphene	0.5
12674-11-2	Arochlor-1016	0.5
11104-28-2	Arochlor-1221	0.5
11141-16-5	Arochlor-1232	0.5
53469-22-9	Arochlor-1242	0.5
12672-29-6	Arochlor-1248	0.5
11097-69-1	Arochlor-1254	0.5
11096-82-5	Arochlor-1260	0.5

00038

EPA SAMPLE NO

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

112

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719773

Sample wt/vol: (g/mL) ML Lab File ID: 715773V

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/20/88

Column: (pack/cap) PACK

Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
---------	----------	---	------	---

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	9	BJ
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	16	E
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	1	J
-----	Total Xylenes	1	J

13
SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

112 LIQUID

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACA2

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719773

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719773AB

Level: (low/med) LOW

Date Received: 10/13/83

% Moisture: not dec. _____ dec. _____

Date Extracted: 10/19/83

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/17/83

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl)Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
100-51-6-----	Benzyl Alcohol	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U
106-41-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
93-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
65-85-0-----	Benzoic Acid	50	U
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethyl Phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U

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SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

112 LIQUID

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACA2

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719773

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719773AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. _____ dec. _____

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-3-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300893

000078

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

112

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719773

Sample wt/vol: 1000 (ml/ml) 10 Tab File ID:

Level: (low/med)

Date Received: 10-13-86

% Moisture:

10-20-88 RRA Date Extracted: 10-21-86 11-23-88

Extraction: (SepF/Cont/Sonic) SEPF

Date Analyzed: 11-09-86

GPC Cleanup: (Y/N) N

pH: 8.1

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000281

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

120 LIQUID

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719759V

Sample wt/vol: (g/mL) ML

Lab File ID: 719759V

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/22/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	28	B
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	22	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300895

000068

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

120

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719759

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88

Extraction: (SepF/Cent/Sonc) SEPF Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
319-84-5	alpha-BHC	0.05	U
319-95-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000377

EPA SAMPLE NO

IA

VOLATILE ORGANICS ANALYSIS DATA SHEET

123

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719772

Sample wt/vol: (g/mL) ML Lab File ID: 715772V

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/20/88

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	16	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300896

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE Q00057.

123 LIQUID

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACA2

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719772

Sample wt/vol:

1000 (g/mL) ML

Lab File ID: 719772AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

dec.

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc)

SEPF

Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N

pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-41-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
93-95-3	Nitrobenzene	10	U
73-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

000058

EPA SAMPLE NO.

1C
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

123 LIQUID

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACA2

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719772 -

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719772AB

Q Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec: dec. _____

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/17/88

Q GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2, 4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzo-furan	10	U
121-14-2-----	2, 4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	1, 6-Dinitro-2-Methylphenol	50	U
36-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3, 3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1, 2, 3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a, h)Anthracene	10	U
191-24-2-----	Benzo(g, h, i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

000076

ID
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

123

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719772

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med) LF

Date Received: 10-13-88

% Moisture:

10-20-88 RPH
Date Extracted: 10-21-88 11/23/88

Extraction: (SepF/Cont/Sanc) SEPF

Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N

pH: 7.7

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000242

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO _____

124 LIQUID

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719756V

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 719756V

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/22/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	11	B
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	12	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

AR300900

000062

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

124

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719756

Sample wt/vol: 1000 (mL/mL) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-86

% Moisture: 10-20-88 RPH Date Extracted: 10-21-86 11-23-86

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-10-86

GPC Cleanup: (Y/N) N pH: 4.8 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND		
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000255

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

126 LIQUID

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719757V

Sample wt/vol: (g/mL) ML Lab File ID: 719757V

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/22/88

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	13	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300902

000064

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

126

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719757

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-21-88 11/23/88

Extraction: (SepF/Cont/Sonic) SEPF Date Analyzed: 11-10-88

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000264

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

128

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719758VR

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 719758VR

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/23/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND			
74-87-3	Chloromethane	10	U	
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	U	
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	63		
67-64-1	Acetone	25	B	
75-15-0	Carbon Disulfide	5	U	
75-35-4	1,1-Dichloroethene	5	U	
75-35-3	1,1-Dichloroethane	5	U	
540-59-0	1,2-Dichloroethene (total)	5	U	
67-66-3	Chloroform	5	U	
107-06-2	1,2-Dichloroethane	5	U	
78-93-3	2-Butanone	13	B	
71-55-6	1,1,1-Trichloroethane	5	U	
56-23-5	Carbon Tetrachloride	5	U	
108-05-4	Vinyl Acetate	10	U	
75-27-4	Bromodichloromethane	5	U	
78-87-5	1,2-Dichloropropane	5	U	
10061-01-5	cis-1,3-Dichloropropene	5	U	
79-01-6	Trichloroethene	5	U	
124-48-1	Dibromochloromethane	5	U	
79-00-5	1,1,2-Trichloroethane	5	U	
71-43-2	Benzene	5	U	
10061-02-6	Trans-1,3-Dichloropropene	5	U	
75-25-2	Bromoform	5	U	
108-10-1	4-Methyl-2-Pentanone	10	U	
591-78-6	2-Hexanone	10	U	
127-18-4	Tetrachloroethene	5	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	5	U	
108-90-7	Chlorobenzene	5	U	
100-41-4	Ethylbenzene	5	U	
100-42-5	Styrene	5	U	
	Total Xylenes	5	U	

AR300904

000066

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

128

Lab Name: _GC Inc._ Contract: __JACA____

Lab Code: 77166/77648 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) _WATER_ Lab Sample: ____ 719758 _____

Sample Wt/vol: _1000_ (ml/ml) _10_ Lab File ID: _____

Level: (low/med) _____ Date Received: _10-13-86_____

% Moisture: _____ Date Extracted: _10-20-86_____

Extraction: (SepF/Cont/Sonic) _SEPF_ Date Analyzed: _11-09-86_

GPC Cleanup: (Y/N) _N_ pH: _7.9_ Dilution Factor: _1.0_

CONCENTRATION UNITS:
(ug/L or ug/Kg) _UG/L_ Q

CAS NO.	COMPOUND	CONCENTRATION	UNITS
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
50-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000364

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

133

Lab Name: Q C INC

Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: _____ SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719771

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 715771V

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/20/88

Column: (pack/cap) PACK

Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
---------	----------	--	---

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	17	B
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	15	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

AR300906

000039

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

133 LIQUID

Lab Name: Q C INC. Contract: _____

Lab Code: _____ Case No.: JACA2 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 719771

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 719771AB

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. dec. Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl)Ether	10	U
95-57-3-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
100-51-6-----	Benzyl Alcohol	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
65-85-0-----	Benzoic Acid	50	U
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethyl Phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U

000040

EPA SAMPLE NO.

1C

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

133 LIQUID

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACA2

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719771

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719771AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. dec.

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzo-furan	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	1,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

000074

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

133

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719771

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-88

% Moisture:

Date Extracted: 10-20-88 RRF

Extraction: (SepF/Cont/Sonic) SEPF

Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N

pH: 7.8

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

AR300909

000424

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: 719777

Sample wt/vol: ... (g/mL) ML Lab File ID: 719777V

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/23/88

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	15	B
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes		

AR3069

000111

EPA SAMPLE NO.

1B

SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACA2

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719777

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719777AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. dec. _____

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND			
108-95-2-----	Phenol	10	U	
111-44-4-----	bis(2-Chloroethyl)Ether	10	U	
95-57-8-----	2-Chlorophenol	10	U	
541-73-1-----	1,3-Dichlorobenzene	10	U	
106-46-7-----	1,4-Dichlorobenzene	10	U	
100-51-6-----	Benzyl Alcohol	10	U	
95-50-1-----	1,2-Dichlorobenzene	10	U	
95-48-7-----	2-Methylphenol	10	U	
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U	
106-44-5-----	4-Methylphenol	10	U	
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U	
67-72-1-----	Hexachloroethane	10	U	
98-95-3-----	Nitrobenzene	10	U	
78-59-1-----	Isophorone	10	U	
88-75-5-----	2-Nitrophenol	10	U	
105-67-9-----	2,4-Dimethylphenol	10	U	
65-85-0-----	Benzoic Acid	50	U	
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U	
120-83-2-----	2,4-Dichlorophenol	10	U	
120-82-1-----	1,2,4-Trichlorobenzene	10	U	
91-20-3-----	Naphthalene	10	U	
106-47-8-----	4-Chloroaniline	10	U	
87-68-3-----	Hexachlorobutadiene	10	U	
59-50-7-----	4-Chloro-3-Methylphenol	10	U	
91-57-6-----	2-Methylnaphthalene	10	U	
77-47-4-----	Hexachlorocyclopentadiene	10	U	
88-06-2-----	2,4,6-Trichlorophenol	10	U	
95-95-4-----	2,4,5-Trichlorophenol	50	U	
91-58-7-----	2-Choronaphthalene	10	U	
88-74-4-----	2-Nitroaniline	50	U	
131-11-3-----	Dimethyl Phthalate	10	U	
208-96-8-----	Acenaphthylene	10	U	
606-20-2-----	2,6-Dinitrotoluene	10	U	

000112

EPA SAMPLE NO.

IC

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP_BLANK

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACA2

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719777

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719777AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. dec. :

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/17/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

99-09-2-----	3-Nitroaniline	50	U
93-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	1,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300912

000082

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: 719777

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-21-88 RRM

Extraction: (SepF/Cont/Sonc) SEP F Date Analyzed: 11-10-88

GPC Cleanup: (Y/N) N pH: 4.7 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000437

EPA SAMPLE NO

CRYOCHEM BLI

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131

Case No.: JACAVO

SAS No.:

SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: 719778V

Sample wt/vol: (g/mL) ML

Lab File ID: 719778V

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/22/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	2	BJ
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	1	J
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	15	B
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300914

000084

SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEETCRYOCHEM
BLANK

Lab Name: QC Inc.

Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: 719778

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-88

% Moisture:

Date Extracted: 10-20-88 RRH

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11-11-88

GPC Cleanup: (Y/N) N

pH: 6.4

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000129

EPA SAMPLE NO.

18
SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

BOTTLE_BLANK

Lab Name: Q C INC.

Contract:

Lab Code: _____ Case No.: JACAI

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719778

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719778AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. dec.

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/18/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	10	U
108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl)Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
511-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
100-51-6-----	Benzyl Alcohol	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U
106-44-5-----	4-Methylphenol	10	U
521-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
57-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-76-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
65-85-0-----	Benzoic Acid	50	U
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethyl Phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U

000130

EPA SAMPLE NO.

1C

SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET

BOTTLE_BLANK

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACAI

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 719778

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 719778AB

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEP F

Date Analyzed: 11/18/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

G

CAS NO.	COMPOUND	UG/L	G
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
36-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	50	U
86-30-8-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	3	J
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

WESTON

APPENDIX D

Contractual Compliance

AR300918



Case 10636

Page 1 of 1

Organic Data Validation Summary

- o - The response factors for 2-butanone were less than 0.05 in the initial and continuing calibration. (See Table I of Appendix E).
- o - The %RSD and %D values for several compounds exceeded the precision criteria in the initial and continuing calibration. (See Table I of Appendix E).
- o - The maximum concentrations of the following compounds were found in the laboratory method blanks.

<u>Compound</u>	<u>Concentration ug/L</u>
acetone*	16
2-butanone*	15
4-methyl-2-pentanone	3 J
styrene	1 J
total xylenes	1 J
bis(2-ethylhexyl)phthalate*	3 J

* = Common Laboratory Contaminant

- o - The semi-volatile extractions of all samples were performed one (1) day in excess of the contractual holding time. (See Appendix E).
- o - The pesticide/PCB extractions of all samples were performed two (2) days in excess of the contractual holding time. (See Appendix E).
- o - The semi-volatile MS/MSD analysis of sample 79-1 had three (3) out of eleven (11) RPDs and one (1) out of twenty-two (22) recoveries outside of QC limits. (See Form III in Appendix E).
- o - The pesticide/PCB fraction of samples 10 MS (719745MS), 10MSD (719745MSD), 79-1 MS (719770 MS), and 79-1 MSD (719770MSD) had low recoveries for dibutylchlorendate.
- o - The laboratory did not submit any tentatively identified compound forms for the volatile and semi-volatile fractions.

AR300919

WESTON

APPENDIX E
SUPPORT DOCUMENTATION

AR300920

TABLE I
Compounds and Associated Samples Affected by Calibration Uncertainty

<u>Volatiles</u>	<u>10</u>	<u>20</u>	<u>28</u>	<u>35</u>	<u>37</u>	<u>47</u>	<u>50</u>	<u>52</u>	<u>54</u>	<u>56</u>	<u>65</u>	<u>78</u>	<u>79-1</u>	<u>80</u>	<u>88</u>	<u>89</u>	<u>103</u>	<u>112</u>
2-butanone	R*	R*	R*	R*	R*	R*												
1,1,2,2-tetrachloroethane	C	C	C	C	C	C	C	C	C*	C*	C	C	C	C	C	C	C	
acetone	C*																	
bromoform	C																	
chloromethane																		
<u>Semi-volatiles</u>																		
bis(2-chloroisopropyl)ether											C	C	C	C	C	C	C	
4-nitrophenol											C	C	C	C	C	C	C	
pyrene											C	C	C	C	C	C	C	
3,3'-dichlorobenzidine											C	C	C	C	C	C	C	
benzo(k)fluoranthene											C	C	C	C	C	C	C	
indeno(1,2,3-cd)pyrene											C	C	C	C	C	C	C	
benzo(g,h,i)perylene											C	C	C	C	C	C	C	

C = %D exceeded 25% in the continuing calibration. Positive results are qualified "J" and quantitation limits are qualified "UJ".

R = Response factor was less than 0.05 in the initial or continuing calibration. Detection limits are qualified "R" and positive results are qualified "L".

* = The "B" qualifier denoting blank contamination supersedes the qualifiers issued in this table.

AR300921

Compounds and Associated Samples Affected by Calibration Uncertainty

<u>Volatiles</u>	<u>120</u>	<u>123</u>	<u>124</u>	<u>126</u>	<u>128</u>	<u>133</u>	<u>trip blank</u>	<u>cryochem blank</u>	<u>bottle blank</u>
acetone	C*		C*	C	C*		C*		C*
2-butanone	R*		R*						
bromoform	C		C	C					C
chloromethane		C			C				
<u>Semi-volatiles</u>									
bis(2-chloroisopropyl)ether		C			C		C	C	C
pyrene		C			C		C	C	C
3,3'-dichlorobenzidine		C			C		C	C	C
benzo(k)fluoranthene		C			C		C	C	C
indeno(1,2,3-cd)pyrene		C			C		C	C	C
benzo(g,h,i)perylene		C			C		C	C	C
4-nitrophenol		C			C		C	C	C
bis(2-ethylhexyl)phthalate									C*
dibenz(a,h)anthracene									C
benzo(g,h,i)perylene									C

C = %D exceeded 25% in the continuing calibration. Positive results are qualified "J" and quantitation limits are qualified "UJ".

R = Response factor was less than 0.05 in the initial or continuing calibration. Detection limits are qualified "R" and positive results are qualified "L".

* = The "B" qualifier denoting blank contamination supersedes the qualifiers issued in this table.

AR300922

000471

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: D

Instrument ID: C Calibration Date(s): 10/19/88 10/19/88

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0:

LAB FILE ID: RRF100= VS1001019	RRF20 = VS201019 RRF150= VS1501019	RRF50 = VS501019 RRF200= VS2001019
-----------------------------------	---------------------------------------	---------------------------------------

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	RRF	RSD
Chloromethane	# 0.997	0.823	0.860	0.912	0.922	0.903	7.3
Bromomethane	1.450	1.313	1.271	1.355	1.313	1.340	5.1
Vinyl Chloride	* 1.297	1.284	1.176	1.290	1.253	1.260	4.0
Chloroethane	0.784	0.734	0.691	0.757	0.721	0.737	4.8
Methylene Chloride	1.490	1.417	1.289	1.396	1.314	1.381	5.9
Acetone	0.299	0.281	0.288	0.277	0.266	0.282	4.4
Carbon Disulfide	2.499	2.685	2.811	3.034	2.954	2.797	7.6
1,1-Dichloroethene	* 1.302	1.250	1.221	1.295	1.245	1.263	2.7
1,1-Dichloroethane	# 2.695	2.603	2.539	2.764	2.581	2.656	3.5
1,2-Dichloroethene (total)	1.371	1.355	1.258	1.429	1.356	1.354	4.5
Chloroform	* 2.848	2.731	2.689	2.984	2.812	2.813	4.1
1,2-Dichloroethane	1.784	1.733	1.726	1.827	1.750	1.764	2.4
2-Butanone	0.037	0.031	0.030	0.028	0.027	0.031	12.6
1,1,1-Trichloroethane	0.472	0.456	0.486	0.534	0.489	0.487	6.0
Carbon Tetrachloride	0.338	0.358	0.390	0.452	0.433	0.394	12.1
Vinyl Acetate	0.542	0.623	0.667	0.750	0.646	0.646	11.6
Bromodichloromethane	0.473	0.498	0.547	0.619	0.582	0.544	11.0
1,2-Dichloropropane	* 0.476	0.471	0.466	0.505	0.467	0.477	3.4
cis-1,3-Dichloropropene	0.239	0.278	0.287	0.320	0.328	0.290	12.1
Trichloroethene	0.484	0.473	0.467	0.503	0.476	0.481	2.1
Dibromochloromethane	0.329	0.415	0.454	0.527	0.541	0.453	19.1
1,1,2-Trichloroethane	0.317	0.349	0.336	0.367	0.370	0.348	6.1
Benzene	0.973	0.957	0.939	0.979	0.792	0.928	8.1
Trans-1,3-Dichloropropene	0.562	0.609	0.627	0.704	0.660	0.632	8.1
Bromoform	# 0.164	0.216	0.262	0.312	0.333	0.257	26.
4-Methyl-2-Pentanone	0.372	0.399	0.431	0.444	0.407	0.411	6.
2-Hexanone	0.372	0.399	0.431	0.444	0.407	0.411	6.
Tetrachloroethene	0.443	0.435	0.421	0.469	0.442	0.442	4.
1,1,2,2-Tetrachloroethane	# 0.496	0.565	0.663	0.689	0.643	0.611	13.
Toluene	* 0.751	0.722	0.712	0.760	0.699	0.729	3.
Chlorobenzene	# 1.033	0.991	0.984	1.038	0.896	0.988	5.
Ethylbenzene	* 0.492	0.480	0.469	0.500	0.478	0.484	2.
Styrene	0.866	0.833	0.810	0.865	0.849	0.845	2.
Total Xylenes	0.540	0.514	0.531	0.554	0.517	0.531	3.
Toluene-d8	1.186	1.190	1.176	1.192	1.175	1.184	0.
BFB	0.809	0.801	0.792	0.809	0.813	0.805	1.
1,2-Dichloroethane-d4	1.452	1.538	1.622	1.709	1.827	1.630	9.

AR300923

00049:

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC. Contract: JACA

Lab Code: OS-131 Case No.: JACAVO SAS No.: SDG No.: 0

Instrument ID: C Calibration date: 10/21/88 Time: 0821

Lab File ID: VS1001021R Init. Calib. Date(s): 10/19/88 10/19/88

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.

COMPOUND	RRF	RRF50	%D	Sample
Chloromethane	# 0.903	0.901	0.2	#
Bromomethane	1.340	1.292	3.6	37
Vinyl Chloride	* 1.260	1.205	4.4	*
Chloroethane	0.737	0.733	0.5	
Methylene Chloride	1.381	1.352	2.1	70
Acetone	0.282	0.328	-16.3	50
Carbon Disulfide	2.797	3.085	-10.3	
1,1-Dichloroethene	* 1.263	1.257	0.5	*
1,1-Dichloroethane	# 2.636	2.585	1.9	# 35
1,2-Dichloroethene (total)	1.354	1.383	-2.1	
Chloroform	* 2.813	2.803	0.4	*
1,2-Dichloroethane	1.764	1.835	-4.0	28
2-Butanone	0.031	0.028	9.7	10
1,1,1-Trichloroethane	0.487	0.474	2.7	
Carbon Tetrachloride	0.394	0.413	-4.8	
Vinyl Acetate	0.646	0.680	-5.3	
Bromodichloromethane	0.544	0.553	-1.7	
1,2-Dichloropropane	* 0.477	0.430	9.9	*
cis-1,3-Dichloropropene	0.290	0.274	5.5	
Trichloroethene	0.481	0.458	4.8	
Dibromochloromethane	0.453	0.492	-8.6	
1,1,2-Trichloroethane	0.348	0.337	3.2	
Benzene	0.928	0.930	-0.2	
Trans-1,3-Dichloropropene	0.632	0.604	4.4	
Bromoform	# 0.257	0.308	-19.8	#
4-Methyl-2-Pentanone	0.411	0.447	-8.8	
2-Hexanone	0.411	0.447	-8.8	
Tetrachloroethene	0.442	0.435	1.6	
1,1,2,2-Tetrachloroethane	# 0.611	0.777	27.2	*
Toluene	* 0.729	0.720	1.2	*
Chlorobenzene	# 0.988	1.042	-5.5	#
Ethylbenzene	* 0.484	0.497	-2.7	*
Styrene	0.845	0.906	-7.2	
Total Xylenes	0.531	0.558	-5.1	
Toluene-d8	1.184	1.155	2.4	
BFB	0.805	0.812	-0.9	R
1,2-Dichloroethane-d4	1.630	1.664	-2.1	

AR300924

7A
VOLATILE CONTINUING CALIBRATION CHECK

000494

Lab Name: Q C INC. Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Instrument ID: C Calibration date: 10/23/88 Time: 0818

Lab File ID: VS1001023 Init. Calib. Date(s): 10/19/88 10/19/88

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.

COMPOUND	RRF	RRF50	%D	
Chloromethane	# 0.903	0.799	11.5	# Samples
Bromomethane	1.340	1.312	2.1	
Vinyl Chloride	* 1.260	1.281	-1.7	* VBIK1023
Chloroethane	0.737	0.762	-3.4	
Methylene Chloride	1.381	1.373	0.6	Trip blank
Acetone	0.282	0.383	-35.8	47
Carbon Disulfide	2.797	2.916	-4.3	128
1,1-Dichloroethene	* 1.263	1.237	2.1	* trip blank (8pk102)
1,1-Dichloroethane	# 2.636	2.468	6.4	# trip blank (8pk102)
1,2-Dichloroethene (total)	1.354	1.337	1.3	trip blank (8pk102)
Chloroform	* 2.813	2.688	4.4	*
1,2-Dichloroethane	1.764	1.793	-1.6	
2-Butanone	0.031	0.029	6.5	
1,1,1-Trichloroethane	0.487	0.456	6.4	
Carbon Tetrachloride	0.394	0.399	-1.3	
Vinyl Acetate	0.646	0.684	-5.9	
Bromodichloromethane	0.544	0.518	4.8	
1,2-Dichloropropane	* 0.477	0.406	14.9	*
cis-1,3-Dichloropropene	0.290	0.280	3.4	
Trichloroethene	0.481	0.449	6.7	
Dibromochloromethane	0.453	0.467	-3.1	
1,1,2-Trichloroethane	0.348	0.332	4.6	
Benzene	0.928	0.921	0.8	
Trans-1,3-Dichloropropene	0.632	0.597	5.5	
Bromoform	# 0.257	0.293	-14.0	#
4-Methyl-2-Pentanone	0.411	0.456	-11.0	
2-Hexanone	0.411	0.456	-11.0	
Tetrachloroethene	0.442	0.412	6.8	
1,1,2,2-Tetrachloroethane	# 0.611	0.737	-20.6	#
Toluene	* 0.729	0.690	5.4	*
Chlorobenzene	# 0.988	0.962	-2.6	#
Ethylbenzene	* 0.484	0.455	6.0	*
Styrene	0.845	0.813	3.8	
Total Xylenes	0.531	0.515	3.0	
Toluene-d8	1.184	1.146	3.2	
BFB	0.805	0.799	0.7	AR300925
1,2-Dichloroethane-d4	1.630	1.646	-1.0	

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC Contract: JACA

Lab Code: 09-131 Case No.: JACAVO SAS No.: SDG No.: 0

Instrument ID: C Calibration date: 10/22/88 Time: 1033

Lab File ID: VSC1001022 Init. Calib. Date(s): 10/19/88 10/19/88

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.

COMPOUND	RRF	RRF50	%D
Chloromethane	# 0.903	0.797	11.7 #
Bromomethane	1.340	1.271	5.1
Vinyl Chloride	* 1.260	1.210	4.0 *
Chloroethane	0.737	0.696	5.6
Methylene Chloride	1.381	1.292	6.4
Acetone	0.282	0.442	-56.7
Carbon Disulfide	2.797	2.877	-2.9
1,1-Dichloroethene	* 1.263	1.194	5.5 * 110
1,1-Dichloroethane	# 2.636	2.381	9.7 #
1,2-Dichloroethene (total)	1.354	1.274	5.9
Chloroform	* 2.813	2.603	7.5 *
1,2-Dichloroethane	1.764	1.678	4.9
2-Butanone	0.031	(0.028)	9.7
1,1,1-Trichloroethane	0.487	0.473	2.9
Carbon Tetrachloride	0.394	0.416	-5.6
Vinyl Acetate	0.646	0.710	-9.9
Bromodichloromethane	0.544	0.551	-1.3
1,2-Dichloropropane	* 0.477	0.424	11.1 *
cis-1,3-Dichloropropene	0.290	0.289	0.3
Trichloroethene	0.481	0.453	5.8
Dibromochloromethane	0.453	0.503	-11.0
1,1,2-Trichloroethane	0.348	0.351	-0.9
Benzene	0.928	0.906	2.4
Trans-1,3-Dichloropropene	0.632	0.633	-0.2
Bromoform	# 0.257	0.323	(25.7) #
4-Methyl-2-Pentanone	0.411	0.475	-15.6
2-Hexanone	0.411	0.475	-15.6
Tetrachloroethene	0.442	0.431	2.5
1,1,2,2-Tetrachloroethane	# 0.611	0.695	-13.8 #
Toluene	* 0.729	0.691	5.2 *
Chlorobenzene	# 0.988	0.988	0.0 #
Ethylbenzene	* 0.484	0.464	4.1 *
Styrene	0.845	0.810	4.1
Total Xylenes	0.531	0.506	4.7
Toluene-d8	1.184	1.168	1.4
BFB	0.805	0.829	-3.0
1,2-Dichloroethane-d4	1.630	1.577	A31300926

AR300926

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131

Case No.: JACAVO

SAS No.: _____

SDG No.: 0

Instrument ID: C

Calibration date: 10/20/88 Time: 1529

Lab File ID: VS1001020

Init. Calib. Date(s): 10/19/88 10/19/88

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.

COMPOUND	RRF	RRF50	%D	
Chloromethane	# 0.903	1.135	25.7	* Samples
Bromomethane	1.340	1.436	-7.2	
Vinyl Chloride	* 1.260	1.319	-4.7	*
Chloroethane	0.737	0.769	-4.3	
Methylene Chloride	1.381	1.424	-3.1	
Acetone	0.282	0.264	6.4	
Carbon Disulfide	2.797	3.262	-16.6	
1,1-Dichloroethene	* 1.263	1.263	0.0	*
1,1-Dichloroethane	# 2.636	2.581	2.1	#
1,2-Dichloroethene (total)	1.354	1.343	0.8	
Chloroform	* 2.813	2.736	2.7	*
1,2-Dichloroethane	1.764	1.706	3.3	
2-Butanone	0.031	0.022	29.0	
1,1,1-Trichloroethane	0.487	0.490	-0.6	
Carbon Tetrachloride	0.394	0.414	-5.1	
Vinyl Acetate	0.646	0.519	19.7	
Bromodichloromethane	0.544	0.529	2.8	
1,2-Dichloropropane	* 0.477	0.440	7.8	*
cis-1,3-Dichloropropene	0.290	0.267	7.9	
Trichloroethene	0.481	0.469	2.5	
Dibromochloromethane	0.453	0.432	4.6	
1,1,2-Trichloroethane	0.348	0.310	10.9	
Benzene	0.928	0.907	2.3	
Trans-1,3-Dichloropropene	0.632	0.590	6.6	
Bromoform	# 0.257	0.250	2.7	#
4-Methyl-2-Pentanone	0.411	0.334	18.7	
2-Hexanone	0.411	0.334	18.7	
Tetrachloroethene	0.442	0.448	-1.4	
1,1,2,2-Tetrachloroethane	# 0.611	0.542	11.3	#
Toluene	* 0.729	0.697	4.4	*
Chlorobenzene	# 0.988	0.972	1.6	#
Ethylbenzene	* 0.484	0.465	3.9	*
Styrene	0.845	0.827	2.1	
Total Xylenes	0.531	0.522	1.7	
Toluene-d8	1.184	1.190	-0.5	
BFB	0.805	0.822	-2.1	
1,2-Dichloroethane-d4	1.630	1.642	-0.7	

AP 300927

6B
SEMI-VOLATILE ORGANICS INITIAL CALIBRATION DATA

000151

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACAI

SAS No.: _____ SDG No.: _____

Instrument ID: 5100

Calibration Date(s): 11/16/88 11/16/88

Min RRF for SPCC(%) = 0.050

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:	RRF20 = HSB201116	RRF50 = HSB501116R
	RRF80 = HSB801116	RRF120= HSB1201116
		RRF160= HSB1601116

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	RSD
Phenol	* 2.100	1.853	1.697	1.513	1.342	1.701	17.3*
bis(2-Chloroethyl)Ether	1.884	1.749	1.644	1.253	1.222	1.550	19.2
2-Chlorophenol	1.543	1.415	1.409	1.295	1.268	1.386	7.9
1,3-Dichlorobenzene	1.516	1.389	1.336	1.205	1.179	1.325	10.4
1,4-Dichlorobenzene	* 1.491	1.357	1.253	1.126	1.077	1.261	13.4*
Benzyl Alcohol	0.980	0.811	0.869	0.754	1.301	0.943	23.0
1,2-Dichlorobenzene	1.467	1.350	1.270	1.133	0.941	1.232	16.5
2-Methylphenol	1.371	1.248	0.903	1.092	1.132	1.149	15.3
bis(2-Chloroisopropyl)Ether	1.671	1.621	1.414	1.218	1.143	1.425	17.5
+Methylphenol	1.437	1.301	1.254	1.136	1.258	1.277	8.5
N-Nitroso-Di-n-Propylamine	1.297	1.256	1.106	0.948	0.706	1.063	22.8
Hexachloroethane	0.685	0.639	0.596	0.512	0.505	0.587	13.4
Nitrobenzene	0.499	0.432	0.419	0.387	0.385	0.424	16.8
Isophorone	1.085	0.945	0.967	0.917	0.533	0.889	20.2
2-Nitrophenol	* 0.240	0.205	0.221	0.208	0.216	0.218	6.3
2,4-Dimethylphenol	0.350	0.306	0.314	0.283	0.291	0.309	8.4
Benzic Acid		0.187	0.211	0.181	0.073	0.163	37.7
bis(2-Chloroethoxy)Methane	0.685	0.586	0.567	0.529	0.532	0.580	11.0
2,4-Dichlorophenol	* 0.307	0.267	0.265	0.247	0.256	0.268	8.6
1,2,4-Trichlorobenzene	0.307	0.268	0.265	0.247	0.243	0.266	9.5
Naphthalene	1.190	0.918	0.794	0.742	0.741	0.877	21.6
4-Chloroaniline	0.751	0.538	0.471	0.412	0.763	0.587	27.5
Hexachlorobutadiene	* 0.136	0.117	0.118	0.110	0.108	0.118	9.4*
4-Chloro-3-Methylphenol	* 0.407	0.348	0.350	0.305	0.332	0.348	10.7*
2-Methylnaphthalene	0.859	0.561	0.492	0.440	0.703	0.611	27.9
Hexachlorocyclopentadiene	# 0.172	0.156	0.164	0.176	0.180	0.170	5.7
2,4,6-Trichlorophenol	* 0.328	0.322	0.318	0.341	0.385	0.339	8.0*
2,4,5-Trichlorophenol		0.300	0.265	0.208	0.197	0.243	20.0
2-Chloronaphthalene	1.202	1.134	1.025	0.962	1.028	1.070	9.0
2-Nitroaniline		0.559	0.455	0.427	0.822	0.566	31.8
Dimethyl Phthalate	1.380	1.356	0.971	0.774	0.961	1.088	24.6
Acenaphthylene	1.948	1.795	1.455	1.394	1.504	1.619	14.8
2,6-Dinitrotoluene	0.296	0.314	0.274	0.174	0.169	0.245	28.1
3-Nitroaniline		0.460	0.368	0.220	0.457	0.376	29.9
Acenaphthene	* 1.244	1.094	0.877	0.866	0.914	0.999	16.5*
2,4-Dinitrophenol	# 0.133	0.125	0.083	0.126	0.117	0.117	19.5
4-Nitrophenol	# 0.278	0.255	0.336	0.566	0.359	0.359	39.6

000152

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACAI

SAS No.: _____

SDG No.: _____

Instrument ID: 5100

Calibration Date(s): 11/16/88 11/16/88

Min RRF for SPCC(%) = 0.050

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:	RRF20 = HSB201116	RRF50 = HSB501116R
RRF80 = HSB801116	RRF120= HSB1201116	RRF160= HSB1601116

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	RSD
Dibenzofuran	2.124	1.523	1.341	1.209	1.127	1.465	27.2
2,4-Dinitrotoluene	0.332	0.358	0.278	0.214	0.320	0.300	18.8
Diethylphthalate	1.504	1.464	1.028	0.847	0.993	1.167	25.5
4-Chlorophenyl-phenylether	0.498	0.469	0.402	0.344	0.353	0.413	16.6
Fluorene	1.130	1.048	0.802	0.555	0.726	0.852	27.7
4-Nitroaniline		0.332	0.231	0.205	0.199	0.242	25.5
4,6-Dinitro-2-Methylphenol		0.115	0.124	0.114	0.081	0.109	17.3
N-Nitrosodiphenylamine (1)*	0.488	0.392	0.445	0.398	0.441	0.433	9.0*
1-Bromophenyl-phenylether	0.155	0.159	0.171	0.171	0.165	0.164	4.4
Hexachlorobenzene	0.180	0.183	0.203	0.247	0.200	0.203	13.2
Pentachlorophenol	*	0.087	0.103	0.108	0.101	0.100	9.0*
Phenanthrene	1.194	1.122	1.089	1.078	1.035	1.104	5.4
Anthracene	1.087	1.006	0.784	0.894	0.652	0.885	19.6
Di-n-Butylphthalate	1.551	1.494	1.320	1.456	1.283	1.421	8.1
Fluoranthene	*	0.965	0.935	0.742	0.847	0.805	0.859
Pyrene	1.953	1.669	1.523	1.395	1.489	1.606	13.6
Butylbenzylphthalate	1.095	1.172	1.168	1.046	1.058	1.107	5.4
3,3'-Dichlorobenzidine	0.237	0.243	0.278	0.264	0.252	0.255	6.5
Benzo(a)Anthracene	1.141	1.159	1.130	1.142	1.153	1.145	1.0
Chrysene	1.059	1.040	1.030	1.049	0.956	1.027	4.0
bis(2-Ethylhexyl)Phthalate	1.500	1.638	1.745	1.563	1.636	1.616	5.7
Di-n-Octyl Phthalate	*	4.103	5.078	5.059	4.450	4.276	4.593
Benzo(b)Fluoranthene	1.485	1.561	1.550	1.806	1.774	1.635	8.9
Benzo(k)Fluoranthene	1.326	1.363	1.283	1.167	0.933	1.214	14.3
Benzo(a)Pyrene	*	1.247	1.346	1.394	1.460	1.385	1.366
Indeno(1,2,3-cd)Pyrene	0.653	0.293	0.503	0.489	0.805	0.549	35.0
Dibenz(a,h)Anthracene	0.682	0.599	0.586	0.633	0.366	0.573	21.2
Benzo(g,h,i)Perylene	0.680	0.528	0.440	0.481	0.374	0.501	23.0
Nitrobenzene-d5	0.532	0.450	0.427	0.406	0.398	0.443	12.2
2-Fluorobiphenyl	1.282	1.118	0.933	0.926	0.942	1.040	15.1
Terphenyl-d14	1.126	1.058	1.001	0.994	0.985	1.033	5.8
Phenol-d5	1.629	1.564	1.421	1.237	1.074	1.385	16.6
2-Fluorophenyl	1.388	1.372	1.324	1.275	1.259	1.324	4.3
2,4,6-Tribromophenol	0.093	0.091	0.085	0.070	0.091	0.086	11.0

(1) Cannot be separated from Diphenylamine

AR300929

7B
SEMI-VOLATILE CONTINUING CALIBRATION CHECK

000235

Lab Name: Q.C. INC.

Contract: _____

Lab Code: _____

Case No.: JACA2

SAS No.: _____

SDG No.: _____

Instrument ID: 5100

Calibration date: 11/17/88 Time: 0956

Lab File ID: HSB501117

Init. Calib. Date(s): 11/16/88 11/16/88

Min RRF50 for SPCC(*) = 0.050

Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D	
Phenol	* 1.701	1.882	-10.6	*
bis(2-Chloroethyl)Ether	1.550	1.779	-14.8	
2-Chlorophenol	1.386	1.401	-1.1	
1,3-Dichlorobenzene	1.325	1.397	-5.4	
1,4-Dichlorobenzene	* 1.261	1.376	-9.1	*
Benzyl Alcohol	0.943	0.726	23.0	
1,2-Dichlorobenzene	1.232	1.349	-9.5	79-1
2-Methylphenol	1.149	1.250	-8.8	
bis(2-Chloroisopropyl)Ether	1.425	2.066	(45.0)	133
4-Methylphenol	1.277	1.251	2.0	123
N-Nitroso-Di-n-Propylamine	1.063	1.210	-13.8	=
Hexachloroethane	0.587	0.653	-11.2	112
Nitrobenzene	0.424	0.473	-11.6	56
Isophorone	0.889	1.015	-14.2	Trip blank
2-Nitrophenol	* 0.218	0.206	5.5	*
2,4-Dimethylphenol	0.309	0.308	0.3	
Benzoic Acid	0.163	0.192	-17.8	
bis(2-Chloroethoxy)Methane	0.580	0.618	-6.6	
2,4-Dichlorophenol	* 0.268	0.266	0.7	*
1,3,4-Trichlorobenzene	0.266	0.277	-4.1	
Naphthalene	0.877	0.923	-5.2	
4-Chloroaniline	0.587	0.483	17.7	
Hexachlorobutadiene	* 0.118	0.116	1.7	*
4-Chloro-3-Methylphenol	* 0.348	0.329	5.5	*
2-Methylnaphthalene	0.611	0.551	9.8	
Hexachlorocyclopentadiene	* 0.170	0.164	3.5	#
2,4,6-Trichlorophenol	* 0.339	0.319	5.9	*
2,4,5-Trichlorophenol	0.243	0.293	-20.6	
2-Chloronaphthalene	1.070	1.204	-12.5	
2-Nitroaniline	0.566	0.480	15.2	
Dimethyl Phthalate	1.088	1.189	-9.3	
Acenaphthylene	1.619	1.804	-11.4	
2,6-Dinitrotoluene	0.245	0.272	-11.0	
3-Nitroaniline	0.376	0.337	10.4	
Acenaphthene	* 0.999	1.044	-4.5	*
2,4-Dinitrophenol	* 0.117	0.107	8.5	#
4-Nitrophenol	* 0.359	0.217	39.6	#

7C
SEMOVOLATILE CONTINUING CALIBRATION CHECK

00023-

Lab Name: Q C INC. Contract: _____

Lab Code: _____ Case No.: JACA2 SAS No.: _____ SDG No.: _____

Instrument ID: 5100 Calibration date: 11/17/88 Time: 0956

Lab File ID: HSB501117 Init. Calib. Date(s): 11/16/88 11/16/88

Min RRF50 for SPCC(%) = 0.050

Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D	
Dibenzofuran	1.465	1.551	-5.9	
2,4-Dinitrotoluene	0.300	0.298	0.7	
Diethylphthalate	1.167	1.327	-13.7	
4-Chlorophenyl-phenylether	0.413	0.447	-8.2	
Fluorene	0.852	0.973	-14.2	
4-Nitroaniline	0.242	0.222	8.3	
4,6-Dinitro-2-Methylphenol	0.109	0.109	0.0	
N-Nitrosodiphenylamine (1)*	0.433	0.496	-14.6 *	133
4-Bromophenyl-phenylether	0.164	0.157	4.3	123
Hexachlorobenzene	0.203	0.180	11.3	
Pentachlorophenol	* 0.100	0.089	11.0 *	112
Phenanthrene	1.104	1.086	1.6	
Anthracene	0.835	0.963	-8.8	S6
Di-n-Butylphthalate	1.421	1.370	3.6	
Fluoranthene	* 0.859	0.793	7.7 *	Trip Blank
Pyrene	1.606	2.021	-25.8	
Butylbenzylphthalate	1.107	1.095	1.1	
3,3'-Dichlorobenzidine	0.255	0.177	30.6	
Benzo(a)Anthracene	1.145	1.173	-2.4	
Chrysene	1.027	1.094	-6.5	
bis(2-Ethylhexyl)Phthalate	1.616	1.557	3.7	
Di-n-Octyl Phthalate	* 4.593	4.853	-5.7 *	
Benzo(b)Fluoranthene	1.635	1.645	-0.6	
Benzo(k)Fluoranthene	1.214	1.522	-25.4	
Benzo(a)Pyrene	* 1.366	1.388	-1.6 *	
Indeno(1,2,3-cd)Pyrene	0.549	0.699	-27.3	
Dibenz(a,h)Anthracene	0.573	0.645	-12.6	
Benzo(g,h,i)Perylene	0.501	0.634	-26.6	
Nitrobenzene-d5	0.443	0.477	-7.7	
2-Fluorobiphenyl	1.040	1.176	-13.1	
Terphenyl-d14	1.033	1.195	-15.7	
Phenol-d5	1.385	1.550	-11.9	
2-Fluorophenyl	1.324	1.420	-7.3	
2,4,6-Tribromophenol	0.086	0.077	10.5	

(1) Cannot be separated from Diphenylamine

AR300931

7B
SEMI VOLATILE CONTINUING CALIBRATION CHECK

000251

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACAI SAS No.: _____ SDG No.: _____

Instrument ID: 5100 Calibration date: 11/17/88 Time: 2254

Lab File ID: HSB501117P Init. Calib. Date(s): 11/16/88 11/16/88

Min RRF50 for SPCC(+) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D	
Phenol	* 1.701	1.832	-7.7	*
bis(2-Chloroethyl)Ether	1.550	1.675	-8.1	
2-Chlorophenol	1.386	1.345	3.0	Sample
1,3-Dichlorobenzene	1.325	1.400	-5.7	
1,4-Dichlorobenzene	* 1.261	1.357	-7.6	*
Benzyl Alcohol	0.943	0.727	22.9	
1,2-Dichlorobenzene	1.232	1.339	-8.7	
2-Methylphenol	1.149	1.192	-3.7	
bis(2-Chloroisopropyl)Ether	1.425	1.752	-23.0	
4-Methylphenol	1.277	1.189	6.9	
N-Nitroso-Di-n-Propylamine	1.063	1.068	-0.5	*
Hexachloroethane	0.587	0.643	-9.5	
Nitrobenzene	0.424	0.439	-3.5	
Isophorone	0.889	0.921	-3.6	
2-Nitrophenol	* 0.218	0.194	11.0	*
2,4-Dimethylphenol	0.309	0.293	5.2	
Benzoic Acid	0.163	0.167	-2.5	
bis(2-Chloroethoxy)Methane	0.580	0.570	1.7	
2,4-Dichlorophenol	* 0.268	0.255	4.9	*
1,2,4-Trichlorobenzene	0.266	0.275	-3.4	
Naphthalene	0.877	0.914	-4.2	
4-Chloroaniline	0.587	0.443	24.5	
Hexachlorobutadiene	* 0.118	0.118	0.0	*
4-Chloro-3-Methylphenol	* 0.348	0.306	12.1	*
2-Methylnaphthalene	0.611	0.542	11.3	
Hexachlorocyclopentadiene	* 0.170	0.157	7.6	#
2,4,6-Trichlorophenol	* 0.339	0.321	5.3	*
2,4,5-Trichlorophenol	0.243	0.301	-23.9	
2-Chloronaphthalene	1.070	1.221	-14.1	
2-Nitroaniline	0.566	0.438	22.6	
Dimethyl Phthalate	1.088	1.197	-10.0	
Acenaphthylene	1.619	1.771	-9.4	
2,6-Dinitrotoluene	0.245	0.267	-9.0	
3-Nitroaniline	0.376	0.310	17.6	
Acenaphthene	* 0.999	1.044	-4.5	*
2,4-Dinitrophenol	* 0.117	0.096	18.0	#
4-Nitrophenol	* 0.359	0.221	38.4	#

000252

7C
SEMOVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACAL

SAS No.: _____

SDG No.: _____

Instrument ID: 5100

Calibration date: 11/17/88 Time: 2254

Lab File ID: HSB501117P

Init. Calib. Date(s): 11/16/88 11/16/88

Min RRF50 for SPCC(+) = 0.050

Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D	
Dibenzofuran	1.465	1.541	-5.2	Samples
2,4-Dinitrotoluene	0.300	0.300	0.0	
Diethylphthalate	1.167	1.261	-8.1	
4-Chlorophenyl-phenylether	0.413	0.450	-9.0	
Fluorene	0.852	1.006	-18.1	
4-Nitroaniline	0.242	0.216	10.7	
4,6-Dinitro-2-Methylphenol	0.109	0.097	11.0	
N-Nitrosodiphenylamine (1)*	0.433	0.501	-15.7	*
4-Bromophenyl-phenylether	0.164	0.158	3.7	
Hexachlorobenzene	0.203	0.183	9.9	
Pentachlorophenol	* 0.100	0.090	10.0	*
Phenanthrene	1.104	1.093	1.0	
Anthracene	0.385	1.013	-14.5	
Di-n-Butylphthalate	1.421	1.274	10.3	
Fluoranthene	* 0.859	0.885	-3.0	*
Pyrene	1.606	1.951	-21.5	
Butyibenzylphthalate	1.107	0.836	24.5	
3,3'-Dichlorobenzidine	0.255	0.169	33.7	
Benzo(a)Anthracene	1.145	1.156	-1.0	
Chrysene	1.027	1.090	-6.1	
bis(2-Ethylhexyl)Phthalate	1.616	1.188	26.5	
Di-n-Octyl Phthalate	* 4.593	3.753	18.3	*
Benzo(b)Fluoranthene	1.635	1.706	-4.3	
Benzo(k)Fluoranthene	1.214	1.446	-19.1	
Benzo(a)Pyrene	* 1.366	1.399	-2.4	*
Indenc(1,2,3-cd)Pyrene	0.549	0.686	-25.0	
Dibenz(a,h)Anthracene	0.573	0.735	28.3	
Benzo(g,h,i)Perylene	0.501	0.650	29.7	
Nitrobenzene-d5	0.443	0.444	-0.2	
2-Fluorobiphenyl	1.040	1.181	-13.6	
Terphenyl-d14	1.033	1.157	-12.0	
Phenol-d5	1.385	1.448	-4.5	
2-Fluorophenyl	1.324	1.353	-2.2	
2,4,6-Tribromophenol	0.086	0.076	11.6	

(1) Cannot be separated from Diphenylamine

AR300933

000010

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACA2 SAS No.: _____ SDG No.: _____

Matrix Spike - EPA Sample No.: 79-1 LIQUID

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	100	0	58.6	59	12- 86
2-Chlorophenol	100	0	82.8	83	27-123
1,4-Dichlorobenzene	50.0	0	43.4	87	36 97
N-Nitroso-di-n-prop.(1)	50.0	0	43.8	88	41 116
1,2,4-Trichlorobenzene	50.0	0	46.4	93	39 98
4-Chloro-3-methylphenol	100	0	88.6	89	23 97
Acenaphthene	50.0	0	48.4	97	46-118
4-Nitrophenol	100	0	39.2	39	10- 80
2,4-Dinitrotoluene	50.0	0	41.4	83	24- 96
Pentachlorophenol	100	0	79.8	80	9-103
Pyrene	50.0	0	64.4	129 *	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMIT RPD REC.
Phenol	100	58.0	58	2	42 12- 86
2-Chlorophenol	100	81.0	81	2	40 27-123
1,1-Dichlorobenzene	50.0	32.4	65	29 *	28 36 97
N-Nitroso-di-n-prop.(1)	50.0	30.6	61	36	38 41 116
1,2,4-Trichlorobenzene	50.0	33.6	67	33 *	28 39 98
4-Chloro-3-methylphenol	100	87.6	88	1	42 23 97
Acenaphthene	50.0	36.4	73	28	31 46-118
4-Nitrophenol	100	38.0	38	3	50 10- 80
2,4-Dinitrotoluene	50.0	27.4	55	41 *	38 24- 96
Pentachlorophenol	100	90.6	91	-13	50 9-103
Pyrene	50.0	49.8	100	25	31 26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 3 out of 11 outside limits

Spike Recovery: 1 out of 22 outside limits

COMMENTS: 79-1 ,LIQUID / INSTRUMENT:B / ANALYST: WSS
1000 MLS/2.0 MLS / SUBMITTED BY: JACA

000536

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC.

Contract: JACA

VBLK1020

Lab Code: 09-131

Case No.: JACAVO

SAS No.:

SDG No.:

Matrix: (soil/water) WATER

Lab Sample ID: BLK1020

Sample wt/vol: _____ (g/mL) ML

Lab File ID: BLK1020

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

Date Analyzed: 10/20/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND		
74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	16	U
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	15	U
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	3	J
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
	Total Xylenes	5	U

AR300935

00C553

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1021R

Lab Name: Q C INC Contract: JACA

Lab Code: 09-131 Case No.: JACAVQ SAS No.: SDG No.: 0

Matrix: (soil/water) WATER Lab Sample ID: BLK1021R

Sample wt/vol: (g/mL) ML Lab File ID: BLK1021R

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. Date Analyzed: 10/21/88

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	7	J
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	1	J
-----	Total Xylenes	1	J

AR300936

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1022

Lab Name: Q C INC.

Contract: JACA

Lab Code: 09-131

Case No.: JACAVQ

SAS No.: _____

SDG No.: 0

Matrix: (soil/water) WATER

Lab Sample ID: BLKC1022

Sample wt/vol: _____ (g/mL) ML

Lab File ID: BLKC1022

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. _____

Date Analyzed: 10/22/88

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	4	J
75-15-0-----	Carbon Disulfide	5	U
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	14	
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloroproppane	5	U
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	1	J
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

AR300937

UUU287

EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AQ_BLANK

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACAI

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: BLKW1116

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: BLKW1116

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. dec. _____

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/16/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
108-95-2-----	Phenol	10	U
111-14-4-----	bis(2-Chloroethyl)Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
100-51-6-----	Benzyl Alcohol	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
65-85-0-----	Benzoic Acid	50	U
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethyl Phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U

AR300938

0028E

EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Q C INC.

Contract: _____

AQ_BLANK_16

Lab Code: _____ Case No.: JACAI SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLKW1116

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BLKW1116

Level: (low/med) LOW Date Received: 10/13/88

% Moisture: not dec. dec. Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11/16/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	3	J
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300939

18
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET000331
EPA SAMPLE NO.

AQ_BLANK_1

Lab Name: Q C INC.

Contract: _____

Lab Code: _____

Case No.: JACAL

SAS No.: _____

SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: BLKW1117P

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: BLKW1117P

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec. dec.

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 11/18/88

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
108-95-2-----	Phenol	10	U
111-44-1-----	bis(2-Chloroethyl)Ether	10	U
95-57-3-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
100-51-6-----	Benzyl Alcohol	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	10	U
106-14-6-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
65-85-0-----	Benzoic Acid	50	U
111-91-1-----	bis(2-Chloroethoxy)Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethyl Phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U

000332

EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AQ_BLANK_17P

Lab Name: Q C INC.

Contract: _____

Lab Code: _____ Case No.: JACAL SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: BLKW1117P

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: BLKW1117P

Level: (low/med) LOW

Date Received: 10/13/88

% Moisture: not dec.

dec.

Date Extracted: 10/19/88

Extraction: (SepF/Cont/Sonc)

SEPF

Date Analyzed: 11/18/88

GPC Cleanup: (Y/N) N

pH: _____

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-10-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300941

000142

ID
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1021PWBB12

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample: JACA_METHOD_BLK

Sample wt/vol: 1000 (ml/ml) 10 Lab File ID:

Level: (low/med) Date Received: 10-13-88

% Moisture: Date Extracted: 10-20-88 RPH 10-21-88 11/28/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-6	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U

000144

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

1021PWB827

Lab Name: QC Inc. Contract: JACA

Lab Code: 77166/77648 Case No.: SAS No.: SDG No.:

Matrix: (soil/water) WATER

Lab Sample: JACA_METHOD_BLK

Sample wt/vol: 1000 (ml/ml) 10

Lab File ID:

Level: (low/med)

Date Received: 10-13-88

% Moisture:

Date Extracted: 10-20-88 RDX 10-21-88 11-23-88

Extraction: (SepF/Cont/Sonic) SEPFI

Date Analyzed: 11-09-88

GPC Cleanup: (Y/N) N

pH:

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4' -DDE	0.1	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4' -DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4' -DDT	0.1	U
72-43-5	Methoxychlor	0.1	U
53494-70-5	Endrin ketone		
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	0.5	U
12674-11-2	Arochlor-1016	0.5	U
11104-28-2	Arochlor-1221	0.5	U
11141-16-5	Arochlor-1232	0.5	U
53469-22-9	Arochlor-1242	0.5	U
12672-29-6	Arochlor-1248	0.5	U
11097-69-1	Arochlor-1254	0.5	U
11096-82-5	Arochlor-1260	0.5	U